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leads to a reduction of sensitivity in the measuring path.

According to US 4,281,248 the radiation of an IR radiation source is supplied to optopneumatic detectors with a chopper alternatively via a reference radiation path and a measuring radiation path. The gas to be measured flows through a long cell in the measuring radiation path and then through a short cell in the reference radiation path.

According to US 5,876,674 the radiation of a radiation source is split into two radiation paths and the gas to be measured guided through an absorption chamber having in each radiation path two optical elements formed as aligned glass rods each at different distance so that the optical path length in the absorption chamber is greater between one pair of optical elements than with the other pair.

The invention is based on the problem of providing an analyzer for determining concentration by transmission measurement which is compact and stable toward outside mechanical and thermal influences and permits a wide concentration range - from a few ppm to several ten percent - to be determined reliably and continuously.

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